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EXAMINER	
RICHER, AARON M	

ART UNIT	PAPER NUMBER
2628	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/018,355	KITANO ET AL.	
	Examiner	Art Unit	
	AARON M. RICHER	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *5,13-20,25,33 and 34* is/are allowed.

6)☒ Claim(s) *1-4,6-12,21-24 and 26-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *20080325*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed July 11, 2008 have been fully considered but they are not persuasive.

2. Applicant's arguments with respect to claims 1 and 21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 21 is objected to because of the following informalities: Line 6 of the claim recites "so as to cover partially cover said display screen" which is grammatically incorrect. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3, 7-9, 21-23, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mok (U.S. Patent 6,008,986) in view of Malgouires (U.S. Patent 5,107,402) and further in view of Tomkewitsch (EP 458019).

6. As to claims 1 and 21, claim 1 recites "A display apparatus comprising: a mounted displaying means for displaying visual information". Mok discloses "a display… placed in the upper housing portion… of the computer housing" (col. 2, lines 50-52). Figures 1-5 of Mok show a display panel (element 24) mounted on a computer

housing. Claim 1 further recites "an operating means for outputting a predetermined signal to control an operation of a device". Mok further discloses operating means, in the form of a keyboard: "A keyboard is placed on top of the lower portion of the computer housing" (col. 2, lines 53-54). Finally, Claim 1 recites "a supporting means for supporting said operating means, said supporting means being provided near a peripheral portion of said displaying means, said operating means being rotatable on said supporting means about a horizontal axis". Mok discloses supporting means for supporting the operating means, in the form of a mechanical link, provided near a peripheral portion of the display (see fig. 3; col. 2, lines 53-67; col. 3, lines 1-11). This disclosure also shows that the operating means is pivotable, or rotatable, on the supporting means with respect to the displaying means and is projected forward. Since the operating means is also lifted on one side (fig. 3), it has rotated about a horizontal axis.

Mok does not disclose the operating means partially covering the displaying means, nor does Mok disclose multiple operating projected positions. Malgouires, however, discloses a computer that can be used in a vehicle (col. 1, lines 55-58), in which the operating means (keyboard) is folded against the screen and partially covers the screen (col. 2, lines 32-47). Further, the Malgouires reference discloses mounts to allow the user to adjust the keyboard's projected position (col. 4, lines 1-19). The motivation for including such features is to improve ergonomics and enhance a user experience while still allowing reduced dimensions of the device (col. 1, lines 38-60). It would have been obvious to one skilled in the art to modify Mok to have operating

means that partially covers the displaying means and that can be projected to multiple operating positions in order to enhance a user experience, but still allow a device to be easily portable as taught by Malgouires.

Neither Mok nor Malgouires discloses a mounted displaying means being mounted in a fixed position within an instrument panel of an automotive vehicle wherein the operating means is substantially flush to the instrument panel at a time of non-operation. Tomkewitsch, however, discloses a keypad for use in an automobile traffic information device that folds up to a displaying means at a time of non-operation (see figs. 1 and 2 and also translated abstract and p. 2 of the translation, which makes clear that the keypad is not operated in the folded up state), but clearly gives a user more function when a user operates on the folded down keypad. It is further noted that this device is installed in the standardized space for car radios (see abstract and also p. 1 of the translation, which states that the device is incorporated into the present bay for car radios), which would place it within the instrument panel, meaning that the folded up keypad would be flush with the instrument panel. While not explicitly found in the reference, it is known in the art that the motivation for mounting a device in this way is to allow compatibility with more cars and also allow for a clean-looking installation. It would have been obvious to one skilled in the art to modify Mok and Malgouires to fold a keypad up against a display mounted within an instrument panel as taught by Tomkewitsch in order to establish a clean look as is known in the art.

7. As to claims 2 and 22, Claim 2 recites “The display apparatus as claimed in claim 1, wherein said operating means is set, at a time of non-operation, to a first position in

which an operating surface faces a display surface of said displaying means". Mok discloses that "When the upper portion or display panel…is swung closed or downwardly, an opposite movement of the mechanism takes place, and the keyboard…moves back into the rest position" (col. 3, lines 58-62). It is clearly shown by Figure 6 of Mok that the display means and the operating means (keyboard) are facing each other in this "rest position". The "rest position" disclosed by Mok is equivalent to the "time of non-operation" recited by Claim 2.

Claim 2 further recites that the operating means is "set, at a time of operation, to a second position in which, rotating said first position, use of said operating surface to initiate the operation is accessible for use". Mok discloses that "When the laptop computer 50 is swung open, as shown in FIGS. 4 and 5, the lower bar 56 is pulled towards the rear of the computer 50. This movement of the lower bar 56 rotates the gears 62 counter-clockwise and forces the upper bar 56 to move towards the front of the computer. As a result, the keyboard 26 is slid outwardly towards the front and concurrently tilted upwardly" (col. 3, lines 51-58). This outward and upward keyboard movement, after the pivoting or rotation of position, is done so that the user can use the keyboard for operation, as in Claim 2.

8. As to claims 3 and 23, claim 3 recites "The display apparatus as claimed in claim 2, wherein said supporting means comprises an arm portion, said arm portion being housed when said operating means is set to said first position". Mok discloses that "said lower bar having an extension arm journaled to said display panel [that] displaces said lower bar to tilt said keyboard angularly upwardly while concurrently causing said

lower bar to rotate said gears and sliding the upper bar and the therewith attached keyboard forwardly and outwardly relative to the housing" (col. 4, lines 40-54). Clearly this describes an arm portion that projects the operating means (keyboard) forward from the displaying means when used.

Claim 3 further recites "[the arm portion] being projected forward when said operating means is set to said second position so as to separate said displaying means from said operating means". Mok discloses that "closing of said display panel causes said lower bar to move forwardly so as to lower the keyboard into the housing" (col. 4, lines 55-61). This describes an arm portion moving back into the housing with the operating means (keyboard) when the operating means are not used.

9. As to claims 7 and 27, claim 7 recites "The display apparatus as claimed in claim 2, wherein the second position is a position in which the operating surface of said operating means forms an obtuse angle relative to the display surface of said displaying means." Figures 2 and 5 of Mok clearly show the display surface (element 22) at an obtuse angle with the operating means (keyboard, element 26).

10. As to claims 8 and 28, claim 8 recites "The display apparatus as claimed in claim 1, further comprising an angle adjusting means for adjusting an angle to be formed between the operating surface of said operating means and the display surface of said displaying means." Mok discloses that the display panel is "pivotable between a folded down closed position and upwardly raised open positions" (col. 5, lines 31-33). The display panel is pivotable with respect to the operating panel and therefore an angle adjustment takes place every time the display panel is pivoted.

11. As to claims 9 and 29, Mok in view of Malgouires and Tomkewitsch discloses the display apparatus as claimed in claim 1. Both Malgouires and Tomkewitsch further disclose a display apparatus for use in an automobile (Malgouires: col. 1, lines 55-60; Tomkewitsch: see abstract), with the abstract of Tomkewitsch further explaining that the invention is installed in the car stereo installation space of an automobile.

12. Claims 4, 6, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mok in view of Malgouires and Tomkewitsch, and further in view of Batio (U.S. Patent 5,949,643).

13. As to claims 4 and 24, claim 4 recites "The display apparatus as claimed in claim 2, wherein, when said operating means is set to said first position, said displaying means makes a display only on a display surface which is free from overlapping with said operating means." Mok in view of Malgouires and Tomkewitsch teaches a display apparatus as claimed in claim 2. None of Mok, Malgouires, and Tomkewitsch teaches displaying means that makes a display only on a display surface which is free from overlapping. Batio, however, discloses "a dual LCD display or split screen 101, with each section being pivotally attached to a keyboard half-section. Each half of the split-screen is independently, pivotally mounted so that each may be moved separately" (col. 8, lines 14-24). Batio further discloses that the screens can be used simultaneously for different purposes: "one half of the split-screen 101 may be used for normal computer functions, such as word processing, by means of the first microprocessor, whereas the second half of the split screen 101 may be used for playing video games via the dedicated game-microprocessor" (col. 8, lines 50-56). Batio discloses many

advantages of a split display, such as for two-player game play (col. 3, lines 61-67; col. 4, lines 1-4) and for use as a translation device (col. 9, lines 15-23). Batio also discloses that the split screen allows the device to be "compactly stored" (col. 2, lines 5-11). Being pivotally mounted, these screens can be folded down onto the operating means (keyboard half-section). It is also shown that the two screens can be used independently of each other. If one screen is in use (free from overlapping means), and the other is folded-down and not in use (not free from overlapping means), only the display surface that is free from overlapping means will be used, as in Claim 4. It would have been obvious to one skilled in the art to modify Mok in view of Malgouires and Tomkewitsch to include a split display, in which only the part of the display free from overlapping means would be used, in order to make the device more useful as taught by Batio.

14. As to claims 6 and 26, claim 6 recites "The display apparatus as claimed in claim 2, wherein said displaying means displays the visual information in a plurality of screens, and wherein, in case the display means is to make a display the visual information when said operating means is set to said first position, the only the part of the display surface free from overlapping with said operating means is operable to display the visual information, and wherein, in case the display means is to display the visual information when said operating means is set to said second position, all of the display surface is operable to display the visual information." Mok in view of Malgouires and Tomkewitsch teaches a display apparatus as claimed in claim 2. None of Mok, Malgouires, and Tomkewitsch teaches a divided display when operating means are set

to first position or second position. Batio, however, discloses a divided display on the entire display surface: "one half of the split-screen 101 may be used for normal computer functions, such as word processing, by means of the first microprocessor, whereas the second half of the split screen 101 may be used for playing video games via the dedicated game-microprocessor" (col. 8, lines 50-56). This describes a divided display on all of the display surface. Also, since Batio states that the screens can be used independently of one another (see rejection of Claim 4), and functions such as word processing and video games use divided displays to show information, toolbars, etc., it is implied that Batio's invention would display a divided display on only one screen if the other screen was not free from overlapping means. In this way, Batio is describing a divided display made only on the display surface free from overlapping with operating means. It would have been obvious to modify Mok in view of Malgouires and Tomkewitsch to include a divided display available on part or all of a screen, in order to allow users to perform multiple tasks at one time as taught by Batio.

15. Claims 10-12 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mok in view of Malgouires and Tomkewitsch and further in view of Ames (U.S. Patent 4,787,040).

16. As to claims 10 and 30, Mok in view of Malgouires and Tomkewitsch discloses the display apparatus as claimed in claim 1. Mok in view of Malgouires and Tomkewitsch does not disclose an invention wherein said operating means permits a user to operate one or more devices, the predetermined signal being output to the device being operated by the user. Ames, however, discloses an operating means that

operates many devices, such as climate control and a CD player (fig. 3). The motivation for this is to provide a single interface for many computerized automobile functions, such as an electronic compass display and appointment calendar (col. 2, lines 20-43). It would have been obvious to one skilled in the art to modify Mok in view of Malgouires and Tomkewitsch to operate one or more devices in order to provide a single interface for many functions as taught by Ames.

17. As to claims 11 and 31, Mok in view of Malgouires and Tomkewitsch and further in view of Ames discloses the display apparatus as claimed in claim 10. Ames further discloses an invention wherein the displaying means is used to display visual information relating to the user's operation of the device via the operating means (fig. 3; col. 5, lines 33-62).

18. As to claims 12 and 32, Mok in view of Malgouires and Tomkewitsch and further in view of Ames discloses the display apparatus as claimed in claim 11. Ames further discloses an invention wherein the one or more devices include at least one of an audio device, an image reproducing device, and a navigation device (fig. 3; col. 5, lines 33-62).

Conclusion

19. Claims 5, 13-20, 25, 33, and 34 are allowed. It is noted that claims 15-19 are allowed for essentially the same reasons the other claims were allowed in the Non-Final Rejection dated October 26, 2004.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON M. RICHER whose telephone number is

(571)272-7790. The examiner can normally be reached on weekdays from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron M Richer/
Primary Examiner, Art Unit 2628
8/21/08